allb/claims

An exhaust device \(for internal combustion engines \) having a pipe element (1) inside which there flow the α exhaust gases, the said pipe element (1) having a housing a. in which a measuring transducer such as an oxygen sensor can be mounted, characterized in that the said housing (2) is formed by a hole prolonged by a bush (3) made \directly through the wall of the said pipe element $\mathcal U$ (T), the said housing 72) being obtained from a first flow-drilling operation followed by a second operation of thread \tapping by deformation, the said flow-drilling operation comprising drilling through the wall with a tool, a speed and a penetration force adapted to cause melting and upsetting of the material around the tool in proportion to the advance of this tool, until a bush of required height and diameter is obtained.

2.

[2] An exhaust device for internal combustion engines according to claim 1, characterized in that the said pipe A element (1) is provided with a wall of substantially uniform thickness of between 1 and 3 mm.

An exhaust device for internal combustion engines according to any one of claims 1 to 2, characterized in that the said pipe element (1) is provided with a wall made of stainless metal alloy.

ess for making an exhaust device according to

claims 1 to 3, characterized in that the said tool comprises an ogival mandrel. adde 37